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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,854	07/22/2003	Kazuya Kimura	SUNSTAF-1025	6549

7590 12/27/2005
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EXAMINER

TAMAI, KARL I

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

5

Office Action Summary

Application No.

10/624,854

Applicant(s)

KIMURA ET AL.

Examiner

Tamai I.E. Karl

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because the Applicant has made numerous grammatical changes to the specification.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. **An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied.** Numbering the paragraphs of the specification of record is not considered a change that must be shown.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4-6, 8, 11, and 15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Linscott, Jr. (US 4250423). Linscott teaches a dynamo having an aluminum housing and an iron, circular stator core, where the housing has a higher coefficient of thermal expansion than the core. The stator and housing having voids 30-32 equally spaced/formed between contact points 33-35 around the axis of the core, which are elastic and bend with the expansion of the stator core into the voids. Linscott teaches the voids can be formed in either the outer surface of the core or the inner surface of the housing. Linscott teaches the area of the voids 30-32 is greater than the area of the contact areas 33-35.

4. Claims 1, 2, 4-6, 8, 11-15, and 20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hunt (US 4888510). Hunt teaches a dynamo having an elastic housing with a greater coefficient of thermal expansion than the circular stator core. The stator having a channel 22 in the outer surface and the housing having recesses 27 formed by the concave flexing of the housing away from the core. Hunt shows the contact area being smaller than the void area.

5. Claims 1-6, 8, 11, 15, 16, and 20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Iseman (US 5218252). Iseman teaches a dynamo having an elastic housing with a different (greater or lesser) coefficient of thermal expansion than the circular stator core. The stator having a channel in the outer surface between three (or more) equally spaced projections 26, and Iseman teaches the projections can be

formed on the inner surface of the housing. Iseman shows the contact area being smaller than the void area and shows the ratio of the first to second area being less than 30%.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iseman (US 5218252) in further view of Brown (US 2735950). Iseman teaches every aspect of the invention except the tab positioned at unequal angles and the recess having a thinned portion with a concave shape. Brown shows the positioning

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projections 30, 38 being spaced at unequally to allow for air passage and mounting bolts. Brown shows the recesses 40 being radially thinner than the tab portions and having concave inner surfaces. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Iseman with the positioning tabs being at unequal angles and concave recesses to accommodate air passages and mounting bolts, as shown in Brown.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iseman (US 5218252). Iseman teaches every aspect of the invention except the ratio of the radial differential being 0.5-1.5%. Iseman teaches the angular position and the radial dimension of the protrusions can be varied to meet the operating characteristics of the dynamo. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Iseman with the ratio of the radial differential being 0.5-1.5% to optimize the performance of machine, as taught by Iseman.

10. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iseman (US 5218252) and Murakami et al. (WO 02/31947)(US 6836045 provided as an translation). Iseman teaches every aspect of the invention except the stator core being silicon steel and the dynamo being a gas compressor. Murakami teaches that compressor motors can be wound with either concentrated (figure 4) or distributed windings (figure 1). It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Iseman with the stator core having

wound or concentrated windings to effectively drive a scroll compressor as taught by Murakami, and because selection between known equivalents is within the ordinary skill in the art.

11. Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iseman (US 5218252) and Hattori (US 5998904). Iseman teaches every aspect of the invention except the stator core being silicon steel and the dynamo being a gas compressor. Hattori teaches the stator core being silicon steel and driving a gas compressor. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Iseman with the stator core being silicon steel and the dynamo being a gas compressor because Hattori teaches the material is a preferred material in dynamo electric machines and because selection of the material based on the intended use is within the ordinary skill in the art (See *In re Leshin*, 125 USPQ 416).

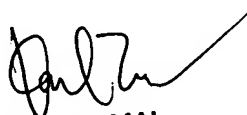
12. Claim 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iseman (US 5218252) and Smerud et al. (US 6000). Iseman teaches every aspect of the invention except the dynamo being a gas compressor with first space having the compression mechanism and a second space with the mouth of the compressor and the voids connecting the two spaces. Smerud teaches a gas compressor with first space having the compression mechanism and a second space with the mouth of the compressor and the voids connecting the two spaces to cool the motor by the suctioned

gas. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the machine of Iseman with a gas compressor with first space having the compression mechanism and a second space with the mouth of the compressor and the voids connecting the two spaces to effectively cool the motor.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (571) 272 - 2036.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg, can be reached at (571) 272 - 2044. The facsimile number for the Group is (571) 273 - 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


KARL TAMAI
PRIMARY EXAMINER

Karl I Tamai
PRIMARY PATENT EXAMINER
December 22, 2005